

Tale of Two Styles: Growth Versus Value

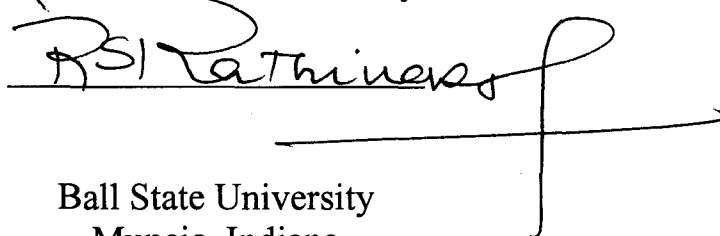
Honors Thesis (HONRS 499)

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A handwritten signature in black ink, reading "RS Rathinasamy", is written over a horizontal line. A long, thin horizontal stroke extends to the right from the end of the signature.

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Table of Contents

Executive Summary	1
Part I: Growth Investing	2
The Fundamentals of Growth Investing	5
Ratios	5
Other Factors	10
Part II: Value Investing	13
The Fundamentals of Value Investing	15
Risk and Return of Value Stocks	18
Part III: Historical Return of Growth and Value Stocks	21
Part IV: Company Analysis	23
Profile	24
Growth Stock?	24
Value Stock?	27
Part V: Conclusion	29
Works Cited	32

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Executive Summary

The goal of every investor is the same: make money. From the time one is born until the day one dies, everyday in between is spent in some capacity undertaking the feat of acquiring wealth! While there are thousands of means for acquiring wealth, the longest lasting method for quickly accelerating one's wealth position has been through the use of the stock market. The mainstay of American investing has been undertaken heavily in one particular exchange, The New York Stock Exchange. The New York Stock Exchange, or the NYSE, was created in 1792 when twenty-four stockbrokers and mercantilists signed the Buttonwood Agreement in an effort to consolidate and organize the exchange of securities.¹

While the exchange still exists and today is now host to over 3,700 issues from more than 3,000 companies, the NYSE does not now nor has it ever given any indication of what company will outperform the market on any given day. Therefore, an astute investor must not only master the fundamentals of investments in order to understand why the market works and moves in the way it does, but also learn the techniques involved in forecasting future market trends.

This paper will provide the education needed to understand the two basic, but very important styles of investing used in today's trading environment. The two basic styles of investing used today are: Growth Investing and Value Investing. The style's name is indicative of the type of stock the style seeks to invest. Growth investors seek to find stocks that are significantly outperforming the market, buy them, and ride the wave of their profits. Value investors use the method in which they take the "bargain hunter"

¹ "Did You Know?" NYSE Online. <http://www.nyse.com/about/about.html> (2 April 2003).

approach in hopes of finding a company undervalued by the market, buy it, and then reap the profits when the market realizes its mistake.

While the process of actually investing using the growth or value style is more complicated than the previous statements suggest, the principles and fundamentals of the style must be understood in order to make an informed decision when investing in the market. The first section will develop the history, fundamentals, and research used to understand the growth style, while the second section will do so for the value style. The third section will examine the historical trends of growth and value investing and which method has outperformed the other over time. Finally, the fourth section will examine Wal-Mart Stores, Inc. This section will apply the knowledge from the previous three sections in order to show how an investor may decide whether or not the growth or value style would apply to Wal-Mart Stores, Inc.

Part I: Growth Investing

As an investor, one wants to buy low and sell high. An investor, however, can also buy high and sell even higher to make a profitable investment. A typical uneducated investor would offer the question, “How is this possible?” The conventional buy low, sell high mentality lies within value stocks, but a type of stock called growth stocks enables an investor to buy stocks at an expensive price and then sell at an even higher price. Now the real question becomes, “How can an investor determine if a stock is cheap or expensive?”

The same question was posed by the father of growth investing, T. Rowe Price. T. Rowe Price believed an investor did not have to hinder his ability to earn a profit in the market by taking stake in the traditional forms of investing. Price thought if a company

was doing well now, and experiencing high to above normal growth, then there is no reason to believe the company's stock price would not rise with the growth as well. Therefore, he developed a set of principles and ultimately an investing firm geared toward growth-oriented stocks and investing. Taken from the website of T. Rowe Price, "Founded by Thomas Rowe Price, Jr. in 1937, T. Rowe Price is an investment management firm, offering clients an exceptional combination of investment management excellence, world class service and guidance."² The firm has been able to sustain its excellence and growth due to Price's knowledge and commitment to the growth style investing method.

The "method" for selecting growth stocks has its differences among growth investors. Often, growth investors use differing criteria to identify attractive candidates for purchase. T. Row Price developed the following criteria which he believed growth stocks display³:

- Growth stocks display high profit margins, return on assets (ROA), and consistent earnings-per-share (EPS)
- Growth stocks lack cutthroat competition
- Growth stocks have superior research to develop new products
- Growth stocks have low labor costs
- Growth stocks are immune from regulation

In conjunction with these characteristics, Price also saw as a test for a growth company as its ability to sustain its growth during adverse economic conditions. Price's motto was,

² "About T. Rowe Price." T. Rowe Price Online. <http://www.troweprice.com/corporate/0,,,00.html> (2 April 2003).

³ Hirschey. "Essential Features." p. 379.

“It is better to be too early than too late.”⁴ Under Price’s assumptions and motto, it becomes clear the growth company must be in an industry where it can inherently have an appealing business and chance to substantially succeed. It is important to remember that most of today’s leading growth companies will slow in growth and start realizing a normal rate of growth. On the other hand, there will be a few companies which will be able to sustain their high growth due to market control, innovation in product, or some other competitive edge. These companies that consistently perform year in and year out are the companies growth investors seek the most.

Fast-growing companies have a way of giving investors a sense of accomplishment. Investors feel after investing in a winning growth company a sense of pride in their decision. The investor just profited from a long position which saw a company utilizing the American dream of capitalism to maximize its ability to turn a profit, and in return made its investor’s wealth position explode. The growth style is an easy style to accept because of the potential rewards.

When it comes to investing in such companies, however, a rather different attitude is required. The investor must look past the giddiness of a job well done, and focus on the task at hand: locate another winning growth company to invest. Nothing offers larger or quicker rewards than growth investing, but nothing offers bigger risks as well. Thus, the job of the astute investor is being able to distinguish today’s fast-growing companies which could be the next Microsoft, from those which are fast growing but may end up filing for bankruptcy in a year, hence Enron. The next section will look more precisely at

⁴ Spencer, Theodore. “Investors of the Century.” Fortune Magazine Online. December 1999. <http://www.fortune.com/fortune/articles/0,15114,379629,00.html>.

the factors in determining a company to be growth-oriented, and how those factors are reflected in the company's financial ratios.

The Fundamentals of Growth Investing

Whether a person is a savvy investor or a professional athlete, the person's capacity for achieving success at a high level started with a basic education of the fundamentals. Investing requires a basic knowledge of the strategies used, why the strategies are used, and how the use of financial ratios factors into an investment decision. The previous section illustrated the goal of growth investing: locate companies with high to above normal growth and buy them. The requisite for buying high to above normal growth companies is having the ability to identify such companies.

Ratios

The use of financial ratios is an excellent starting point for an investor in determining whether a company is growth or value. The four basic ratios used in determining a growth-oriented company are: Earnings-Per-Share Growth (EPS), Price/Earnings Ratio (P/E), Price/Book Ratio (P/B), and the PEG Ratio (P/E ratio divided by the EPS ratio). There are thousands of ratios that can be calculated upon viewing a balance sheet, income statement, or statement of cash flows for a particular company. The four ratios mentioned above, however, are the ratios which most closely and consistently identify growth companies.

The first ratio, earnings-per-share, is the most widely used ratio in determining growth. Earnings-per-share is a measure of how well a company is earning a profit in reference to the number of shares of securities it has outstanding. Thus, taking the firm's overall profit or net income, and then dividing the amount by the number of outstanding

shares of stock by the firm calculates the ratio. The investor must be careful though when using this ratio. In practical application, current EPS growth often is not correlated with long-term or historical EPS growth.

In the short-run, a young prosperous company earning a high rate of EPS growth can be expected to continue this growth for a few years in the future. What states high EPS growth though? The answer lies within industry. While any sign in EPS growth by a company can be a good signal, if an industry's normal EPS growth is 100% and company XYZ has EPS growth of 75% then there may be a problem with XYZ Company and it should not be considered for investment. If XYZ is in an industry where the normal EPS growth is 10% and it is experiencing EPS growth of 20%, then the XYZ company presents an excellent investment opportunity.

Frame of reference is critical with this financial ratio determinant of growth. The frame of reference for why the EPS growth is the number it appears to be is important because the high growth could be coming from false indicators. For example, XYZ Company could be in the oil industry. The industry as a whole could be affected by extraneous economic variables, such as shortage or new deposit discoveries, which could cause large stock price variances. As in the year 2000, oil prices tripled due to economic conditions and regulation from OPEC, thus oil-producing companies saw an increase in their EPS growth of over 250%.⁵ A thorough investigation behind a company's EPS growth and the industry's normal EPS growth is necessary in determining whether or not a company is superiorly performing. The following chart serves as a good example as to why an investor should undertake a rigorous investigation behind a company's EPS

⁵ "How to Pick Stocks." Investopedia Online. <http://www.investopedia.com/articles/00/122700.asp> (2 April 2003).

growth. This chart lists five companies, their EPS growth over a five-year span, and what their projected EPS growth was expected to be over the same time period⁶:

Company Name	Industry	EPS Growth 5-Year Span	Projected EPS Growth
America Online	Internet	76.50%	92.50%
Viacom Inc.	Entertainment	-10.00%	48.00%
Novell Inc.	Computer Software	-27.00%	45.00%
Unisys Corp.	Computer	24.00%	40.50%
MCI WorldCom	Telecom Svcs.	19.50%	38.50%

Table 1.0 data source: Value Line Investment Survey for Windows, January 2000

Earnings-per-share growth as shown in the above chart can be misleading.

Though the ratio can be misleading, it is still the best indicator for high growth. The job of the investor is to sift through the information surrounding the EPS growth and decide if the growth is authentic or an effect of some other extraneous economic variable. As stated above, if the EPS growth is authentic and can be correlated to company's XYZ financial practices then the astute investor should seriously consider taking a long position in XYZ Company.

The next set of financial ratios of interest to growth style investors are the Price/Earnings Ratio, or P/E ratio, and the Price/Book Value Ratio, or P/B ratio. The P/E ratio tells an investor how much he or she is paying for a stock in reference to its earnings. A P/E ratio of 20 for example, would tell the investor the stock is currently selling for 20 times the current EPS. Growth stocks are typically characterized by very high P/E ratios. High P/E ratios indicate to investors that other people are willing to pay a very high price for the current earnings of the company. This high P/E, however, also reflects investor's opinions about the company's future prospects and potential for very

⁶ Hirschey. Table 10.1 p. 378.

high EPS growth and strong stock price increases. Investor's mindset for purchasing stocks with high P/E ratios is, "What appears precious at 25 times the current year's earnings will look cheap at today's price a year or two from now."⁷

P/B ratios are similar to P/E ratios. P/B ratios send similar signals to investors about what other investors believe to be true about XYZ Company. As with high P/E ratios, high P/B ratios also indicate a strong potential for growth and increase in stock price. High P/B ratios arise because investors feel the true book value of XYZ Company's stock is not nearly high enough due to its true economic intrinsic value. Thus, the investor is willing to pay high prices now in order to gain even higher profits when the market realizes how good of a company XYZ Company really is in the future.

The following chart provides a good example for how high P/E and P/B ratios are associated with high EPS growth rates and often growth-oriented companies⁸:

Company Name	Industry	P/B Ratio	P/E Ratio	Projected EPS Growth
Yahoo! Inc.	Internet	122	209.7	70.50%
Avon Products	Toiletries	120.3	25.3	12.50%
America Online	Internet	43.3	185	92.50%
Oracle Corp.	Computer Software	41.5	88.7	25.00%
Dell Computer	Computer Software	29.6	60.9	34.50%

Table 1.1 data source: Value Line Investment Survey for Windows, January 2000

The table indicates how high P/E and P/B ratios can often be seen together. While there is not a perfect positive correlation of 1 between P/E and P/B, there is enough correlation for an investor to infer certain characteristics. Again, investing is not an exact science and takes an education of the fundamentals, yet does require some luck.

⁷ "Growth Vs. Value Investing." [Kiplinger Online](http://www.kiplinger.com/basics/investing/grovsval.html).
<http://www.kiplinger.com/basics/investing/grovsval.html> (15 April 2003).

⁸ Hirschey. Table 11.2 p.434-435.

The final ratio to be discussed under the growth style investing section is the PEG Ratio. The PEG ratio was developed by perhaps the best investor of all time, Peter Lynch. Lynch developed the PEG ratio dividing a company's P/E ratio by its EPS growth rate. For example, if a company had a P/E of 20 and an EPS growth rate of 20%, then its PEG ratio would be 1. These rules are the most widely accepted rules of thumb for PEG ratios⁹:

- If $PEG < 1$, the stock may be worthy of investment attention and possible purchase
- If $PEG < 0.5$, the stock is definitely worthy of investment attention and may represent a very attractive investment
- If $PEG < 0.33$, the stock is apt to represent an extraordinarily attractive investment opportunity

The PEG ratio can tell an investor a lot of information about a company and in particular a possible growth-oriented company. The goal of the investor is to understand what makes a PEG ratio low. First, the PEG ratio can be lowered by a smaller P/E ratio. Previous evidence has shown though most growth companies exhibit high P/E ratios. An investor looking for PEG ratios formed by low P/E ratios would be unwise. Thus, the best method for producing low PEG ratios is by having very high EPS growth. Mentioned as the most important factor for locating growth companies, EPS growth is the most important factor in producing low PEG ratios.

Forecasting now factors into the investor's approach. Accurately forecasting EPS growth is essential in separating good growth companies to invest from excellent growth companies to invest. EPS growth is a factor of multiple decisions made by the firm on such issues as: risk tolerance for investment opportunities, its degree of leverage, and its

⁹ Hirschey. "PEG: Growth at a Reasonable Price." p.403.

dividend payout ratio. All of these factors can influence a firm's EPS growth rate.

Because of these decisions by a firm's management, investors have developed an approach, growth-at-a-reasonable-price. Disciplined growth investors define growth-at-a-reasonable-price as seldom taking a long position in growth stocks with PEG ratios greater than one.

The financial ratios of a firm can provide very large clues as to whether or not a firm is growth or not. The investor needs to remember these ratios are only clues and not absolutes. Therefore, other factors must be considered as well. These factors can range from the type of industry the firm is in, the risk surrounding the firm, and the current economic conditions for the time period in which the investor is investing. The next section will cover these topics.

Other Factors

When the astute investor is searching for growth companies to invest not only should financial ratios be considered, but also the type of industries that are conducive to producing growth-oriented companies. For example,

Industry Name	ROA (%)	ROE (%)
Toiletries/Cosmetics	10.50%	31.26%
Drug	10.42%	22.51%
Cement & Aggregates	10.21%	18.80%
Electrical Equip.	9.92%	20.69%
Retail Building Supply	9.74%	16.71%
Semiconductors	9.39%	13.47%
Household Products	8.93%	30.16%
Medical Supplies	8.83%	21.57%
Furn./Home Furnishings	8.43%	18.10%
Computer Software	8.36%	17.14%

Table 1.3 data source: Value Line Investment Survey for Windows, January 2000

The chart provides a succinct list of the ten major industries that most often produce growth companies based upon return on assets (ROA), and return on equity (ROE)¹⁰. Certain industries simply do not have enough room to support high growth-oriented companies. These types of industries require companies to either innovate new products or find a major method to cut costs. Those industries typically are but not limited to: Petroleum (Producing), Cable TV, Internet, and Entertainment.

Besides looking at industries as an indicator for growth companies, an investor must look at risk as well. Customer loyalty risk is the first key risk factor to consider. Industries, which are conducive to high ROA's and ROE's, are also the industries which have high profit margins. Thus, competitors are waiting in line to join the industry and eat up the profits, and in the long run their competitor's customers. The investor must remember, however, the industry alone will not make a profitable growth company. The company must still make the right decisions in order to be successful and promote growth.

Regulation risk is also important. Profitable companies are often in industries without much regulation. As T. Rowe Price stated in his growth company characteristics, companies in lightly regulated industries have the most fertile fields for growth. Without regulation, companies have few to no government rules or regulations to follow which may have increased their chance for economic loss. Thus, emerging industries with new and innovative product offerings are the most likely industries to produce fast growing growth companies because few rules are written to stunt their progress.

The last factor affecting growth companies is economic conditions. Economic conditions change constantly, and forecasting the future condition is difficult to do.

¹⁰ Hirschey. Table 10.2 p.382.

Thus, the rule of thumb is when one style of investing is in favor the other is not. When economic conditions are good, the markets are up, and people are feeling bullish, this time period is when growth companies will perform. Again as mentioned by T. Rowe Price, the best growth companies to invest are the ones which perform regardless of economic conditions, especially poor conditions. Keeping all factors in mind from financial ratios, to risk, to economic conditions, the astute investor should be able to locate the next winning growth company to invest.

The following table is taken from *FORTUNE* Online and is the most recent list of the top ten fastest growing companies in the U.S.¹¹ The list was formed by taking companies with a minimum of \$50 million in revenue over the past year, and annual sales and EPS growth of at least 25 %.

Rank	Company	EPS Growth	Revenue Growth	Total Return
1	Nvidia	189%	104%	53%
2	Dynacq Int.	115%	59%	115%
3	Chang's China Bistro	166%	60%	43%
4	Frontier Oil	109%	104%	38%
5	XTO Energy	117%	53%	46%
6	Patina Oil and Gas	106%	45%	77%
7	Quicksilver Resources	62%	69%	56%
8	Cytoc	92%	70%	33%
9	St. Mary Land	10231%	49%	33%
10	Hot Topic	63%	49%	81%

Table 1.4 data source: *FORTUNE* Online, March 2003

The previous sections have helped the reader identify what is growth style investing, the financial ratios used in determining growth, and how risk and economic conditions can affect growth. The next section will take the position of the astute investor trying to understand value style investing. The section will examine the history

¹¹ "100 Fastest-Growing Companies." *FORTUNE* ONLINE. <http://www.fortune.com/fortune/fastest> (3 March 2003).

of value investing, the financial ratios involved, along with other factors which may be useful in determining a company to be value.

Part II: Value Investing

The value investment strategy is based on the notion of buying firms that are undervalued, or priced below their intrinsic worth. Although the value investment strategy is not the most popular strategy in today's market, it is commonly used and has reaped some generous returns to investors throughout the years. In the following sections, the history of the value investing strategy will be discussed, as well as the fundamentals of value investing, and the historical performance of the value strategy. Also, an application will be presented on how to assess a stock and determine whether or not it qualifies as a value stock.

The beginnings of value investing can be traced back to the 1930's when a pair of professors developed the idea of investing in undervalued firms. Benjamin Graham and David Dodd were finance professors and businessmen, and in 1934 they published what is now known as the "bible" for value investors, a book entitled *Security Analysis*. Graham is more widely known among the two, and his name is considered one and the same with value investing.¹²

Benjamin Graham started out as a Wall Street broker earning \$12 a week in the early 1900's. He quickly progressed to the position of full partner in Newburger, Henderson & Loeb before starting his own firm. Graham started a hedge fund that invested in extremely undervalued securities. His approach was so successful that by

¹² Hirschey p.437.

1929 he was making \$600,000 a year and turned down promising employment opportunities with prominent Wall Street firms.¹³

The period of the 1920's was one of tremendous market growth. The Dow Jones Industrial Average surged to record highs until an enormous crash in September of 1929. His dependence on financial leverage and the market crash caused Graham to lose substantially. However, Graham did not give up hope, but instead learned some lessons from the market growth and crash in the 1920's. He realized that the real measure of a firm's worth does not come from the stock market prices, but instead from a firm's fundamentals. Dividends, earnings, real and intangible asset values and future outlook all play a part in the valuation of a firm.¹⁴

Graham developed what is known as the margin of safety concept, an idea that explains the basic concept behind value investing. The basis of the margin of safety concept is that the difference between the real value of a firm and the stated price is the margin of safety. The margin of safety is the spread that allows an investor to withstand bad luck or unforeseen circumstances. The principle Graham idea is to look at the intrinsic, or real economic value of the firm and pick stocks that have high intrinsic values. Graham's principles were widely read and influenced future investors, including billionaire Warren Buffett.¹⁵

Warren Buffett is probably the most widely known present day value investor. He led a relatively modest life during childhood and early adulthood, but always had the intelligence and the business savvy. Having little use for school, but an uncanny ability to understand business, Buffett graduated in three years. He then went to work for

¹³ Hirschey p. 437.

¹⁴ Hirschey p. 437.

¹⁵ Hirschey p. 437.

Benjamin Graham, the man he studied and admired. Buffett's passion grew to be looking at the inner workings of a company and studying the management to determine their effectiveness, as well as looking at the financials. Much like Graham, Buffett built up a portfolio of undervalued stocks and quickly made a sizeable amount of money as a result.¹⁶ By far Buffett's best move was holding on to the stock of Berkshire Hathaway, an insurance conglomerate that was not valued highly when Buffett decided to invest. Berkshire Hathaway's price rose from a meager \$12 a share in the middle of the 1960's to a robust \$70,500 a share today.¹⁷ The value investing strategy certainly paid off for Buffett, as he is now one of the richest men in the world.

The Fundamentals of Value Investing

Several different equations and formulas can be used to determine what is and what isn't considered a value stock. Capaul, Rowley and Sharpe note in their article *International Value and Growth Stock Returns*, that an easy classification for value stocks is to compare a stock's current price per share to its stated book value per share. The implication is that a high current price to book value means the future prospects of the firm look good and the firm would not be considered a value stock. On the other hand, a low price to book value implies that the future growth prospects do not look good in relation to the book value, or the embedded costs of the firm.¹⁸ Book value is the historical price of the firm's financial and tangible assets, and it is a measure of the firm's original worth. A price to book ratio of less than one could place a stock into the value category, while a price to book ratio of over two could place a stock in the growth

¹⁶ "Warren Buffett Biography" Beginnersinvesting Online.
<http://beginnersinvest.about.com/library/titans/bl-warrenbio.htm>.

¹⁷ Hirschey p.436.

¹⁸ Capaul, Rowley, and William F. Sharpe. "International Value and Growth Stock Returns" p. 27.

category. The typical stock has a price to book ratio of around 1.6:1. However, one cannot clearly define the line between growth and value stocks based on the price to book ratio alone. Research is needed to determine whether a stock would qualify as a value stock or a growth stock, based on the current norms and the overall market performance.¹⁹

The chart below shows some of the recent stocks that would be considered value stocks by the fundamental indicators of value. All of the stocks have price to book values of less than one, which is a good indicator of value stocks. Another interesting thing to note is the industry that the ten stocks fall into. Several are in the homebuilding industry and several are in the retail industry. An astute investor looks for signs as to particular industries that contain a large number of value stocks.

Bargain Basement Stocks				
Stock Name	Recent Price	Price to Net W. Cap. %	Price to BV	Industry
Beazer Homes USA	18	80%	58%	Homebuilding
Hovnanian Enterprises	5 7/8	85%	45%	Homebuilding
Hancock Fabrics	2 13/16	87%	64%	Retail (Special Lines)
Blair Corp.	18	90%	62%	Retail (Special Lines)
HomeBase Inc.	2 11/16	98%	25%	Retail (Building Supply)
Kaman Corp.	10	99%	68%	Diversified Co.
NCH Corp.	40	108%	86%	Chemical (Specialty)
Oxford Inds.	17	128%	79%	Apparel
U.S. Home	35	130%	71%	Homebuilding
Standard Pacific Corp.	10	136%	70%	Homebuilding

Table 2.1 data source: Value Line Investment Survey, Windows 2000

Another commonly used measure of a stock's value is the price to earnings ratio. The price to earnings ratio of a firm can be compared to that of another firm or the market as a whole to determine what type of worth investors place on the firm. A high price to

¹⁹ Hirschey p.441.

earnings ratio means that investors look for promising growth prospects, while a low price to earnings ratio means that investors do not foresee earnings potential for a firm. Firm's that have low P/E ratios may be characterized as value stocks, but investors must be wary that firms with low P/E ratios are not distressed firms with no upside. A typical P/E ratio is between 10:1 and 20:1, so firm's that have lower ratios may be considered to be in the value category.²⁰

A third fundamental indicator used in assessing value stocks is free cash flow. Free cash flow is made up of earnings before interest, taxes, depreciation, and amortization minus the expenditures necessary for working capital. Free cash flow measures profitability, and shows how much cash is generated in excess of the needed amount for building and expansion. Thus, a company with a high price to cash flow ratio is one that investors value highly and believe has positive growth prospects. The value stocks generally have low price to free cash flow ratios, meaning these stocks are potential restructuring candidates and possible candidates for takeovers.²¹ Once again, as is the case with the other ratios, the price to free cash flow ratio is not a clear-cut indicator of how to characterize a stock, but it does indicate which stocks are valued by investors and which ones aren't.

Dividend yield is also a useful indicator of fundamental value because it shows how much a company pays out in dividends in relation to its price. A high dividend yield signals a firm that may be an attractive investment opportunity and is an indication of a value stock, but investors must be aware that an opportunity cost is associated with paying dividends. The dividends paid out could have been reinvested in the company to

²⁰ Hirschey p.440-441.

²¹ Hirschey p.445.

enhance growth opportunities, possibly earning investors higher returns in the future.²²

The key is to determine why the dividend yield is so high. If it is high because the price is temporarily depressed, the firm may be an attractive investment opportunity, but if it is high because management doesn't know what to do with excess earnings it may not be an attractive investment opportunity.

A less used but still valuable fundamental indicator of value is the private-market value. The private-market-value is the price that a well-informed investor would pay for the entire firm. The private-market-value takes into account all the tangible and intangible assets of a firm as well as the on and off balance sheet liabilities, and is also known as the potential acquisition price of a firm. Firm's that are undervalued will display prices that are below their true private-market-values. Private-market value can be an indicator to investors as to which firms may be the hidden gems.²³

Risk and Return of Value Stocks

Value investing is for patient investors because it is a long-term strategy. However, even though the value strategy is long-term and less risky than other investment strategies, it is not considered risk free. In fact, value stocks can produce long periods of poor performance.²⁴ The reason that value stocks can be risky is that they are often firms that are in financial distress. In an article in the *Journal of Business*, Chan and Chen call these firms "fallen angels," due to the fact that their earnings to assets are low. In addition, their earnings as coverage of fixed expenses are usually low.

²² Hirschey p.446.

²³ Hirschey p.446.

²⁴ Asness, Friedman, Krail, and John M. Liew. "Style Timing: Value versus Growth" p.50.

Often these firms are highly leveraged, meaning they take on large amounts of debt, and they have bleak earnings forecasts.²⁵

Value stocks only prove to be profitable investments if they are undervalued. If stocks appear favorable but they are on the decline and have no future prospects they may be considered “dogs.” A “dog” is a firm that is in earnings distress and has no prospects of improvement.²⁶ The firm’s condition is likely to deteriorate and investors should be weary of these stocks. The reason that firms turn into dogs varies, but more often than not they turn into dogs because of mismanagement or industry deterioration. Self-centered management can cause a firm’s earnings potential to drop rapidly and can result in hostile takeovers and investor skepticism. Sometimes an entire industry can become permanently depressed and the future earnings potential for the entire industry is miserable. Consequently, value investing involves some risk, as the true value stocks cannot often be determined from the dogs. With time and patience the undervalued stocks can be found, but not all investors devote the necessary time or have the necessary patience.

While value stocks definitely are not risk free, they have provided higher returns than growth stocks in the long run. One international stock study, in which a portfolio of stocks with high price/book ratios and a portfolio of stocks with low price/book ratios were selected, found that from 1981-1992 the value portfolio outperformed the growth portfolio on average and after accounting for risk.²⁷ The portfolios were made up of stocks from six countries: France, Germany, Switzerland, U.K., Japan, and the U.S. In addition, three indexes were used as measuring sticks for the six countries: the value

²⁵ Zhang. “Risk and Return of Value Stocks” p.501.

²⁶ Hirschey p.428.

²⁷ Capaul, Rowley, and William F. Sharpe. “International Value and Growth Stock Returns” p. 27.

stock index, the growth stock index, and a market index. The results of the study show that while value stocks outperformed growth stocks for the period as a whole, in certain times and for certain countries value stocks did not outperform growth stocks. For example, the cumulative value-growth spread, which measures the difference between the return on value stocks and the return on growth stocks, was negative from 1983-1988.²⁸ The indications from the test are that the value strategy works better on an international basis than a country-by-country basis.

One may presume that since the return of the value stocks was higher during the period, the risk was also higher, but interestingly the opposite is the case. The majority of the value stocks in the portfolio had lower betas than the growth stocks. The expectation would normally be that the value stocks would perform worse with the lower inherent risk, but this was not the case in the international stock study that was conducted by Capaul, Rowley, and Sharpe.

Another international stock study, conducted by Feng Zhang, found that the returns on value stocks were higher over the long run than the returns on growth stocks. The study also intended to find out if the higher returns on value stocks were compensation for the added risk due to the distressed nature of the firms.²⁹ The dividend payout was the fundamental indicator used to determine whether a stock belonged in the value category, and the test period ran from July 1970-December 1993. The results of the study were that value stocks provide a higher return as compensation for the added risk. Of the six countries involved in the study, in only two, Taiwan and Thailand, did the value stocks not substantially outperform the growth stocks. The value stocks in the

²⁸ Capaul, Rowley, and William F. Sharpe. "International Value and Growth Stock Returns" p.33.

²⁹ Zhang. "Risk and Return of Value Stocks" p.535.

U.S., Japan, Hong Kong, and Malaysia performed better as a whole than the growth stocks. The conclusion in the study was that Taiwan and Thailand are extremely high growth markets and the value stocks are not nearly as distressed and do not have as great a chance to gain. On the other hand, many of the value firms in the U.S. and other developed countries are distressed and have uncertain futures. The uncertain futures are the reason for the depressed stock prices and the chance for a gain if prospects improve.³⁰

Part III: Historical Return of Growth and Value Stocks

Growth stocks and value stocks have both performed well during certain periods of time, but both types of stocks do not usually perform well during the same time period. For example, growth stocks were the craze in the boom period of the 1990's, while the value investing strategy was not popular in the least. The 1990's were a time of tremendous economic growth and an abundance of new technology stocks. Price to earnings ratios reached all time highs near the end of the decade and the growth investing strategy was the most profitable one. Not surprisingly, growth investors earned large returns during this time, and growth stocks outperformed value stocks in the period. Growth stocks tend to do well during periods of strong economic growth.

Value stocks, on the other hand, are usually marginal firms that are in distress. Their prices are depressed for one reason or another, and they usually have bleak earnings expectations. While growth stocks tend to do well in a strong economy, value stocks are just the opposite. When the economy is weak the value investing strategy usually garners investors a higher return. In the early 2000's, the value investing strategy became more popular as growth investors were losing money in the declining stock

³⁰ Zhang. "Risk and Return of Value Stocks" p.535.

market. Value investing is based on the contrarian approach, which is to invest in stocks that are not highly valued. Value investing does not work as well in strong economic times, when the prices of stocks are being bid up at astronomical rates.

Professors Scott Bauman and Robert Miller conducted a study on growth and value stock returns from 1980-1993 to determine when each group fared well during the period. The price to earnings ratio was used as the indicator of value and growth stocks. Stocks were divided into four different portfolios based on price to earnings ratios, with portfolio A having the lowest and portfolio D having the highest. The purpose of the study was not only to measure the stock returns during the period, but also to measure any earnings surprises. The table with stock returns that Bauman and Miller constructed is shown below³¹.

Price/Earnings Ratio Portfolios						
		A	B	C	D	Market Index Return
Year	Number of Stocks	Low			High	
1980	347	52.70%	41.40%	43.80%	50%	43.80%
1981	539	2.7	-7.2	-14.2	-16.6	-12.9
1982	666	49.6	49.0	44.1	61.1	44.8
1983	620	18.4	14.1	9.7	4.9	7.9
1984	646	31.4	26.2	19.0	12.1	18.2
1985	671	43.2	42.7	35.5	31.2	36.9
1986	637	17.4	17.8	19.6	24.3	23.0
1987	630	-9.3	-6.4	-2.9	-6.6	-8.3
1988	750	15.1	15.7	12.1	14.8	16.7
1989	784	6.1	10.1	14.0	15.3	18.0
1990	771	1.5	8.4	9.2	9.4	12.7
1991	733	26.4	22.3	14.9	13.1	11.7
1992	634	28.6	22.8	17.1	22.0	15.2
1993	690	0.8	3.7	3.2	9.4	6.0
Geometric Mean		19.3	17.8	15.3	16.2	15.9
Arithmetic Mean		20.3	18.6	16.1	17.5	16.7

Exhibit 1 from *Investor Expectations and the Performance of Value Stocks versus Growth Stocks*

³¹ Bauman, Scott. and Robert Miller. "Investor Expectations and the Performance of Value Stocks versus Growth Stocks." *The Journal of Portfolio Investment*. Spring 1997.

As is shown from the table, the mean return on value stocks during the period is higher than the mean return on growth stocks. The mean return on value stocks is also higher than the market average for the period. From the chart it appears that value investing clearly provides the higher historical returns than growth investing. However, it must be noted that in 1987 the lowest price to earnings stocks suffered the largest losses out of all of the categories, so the value investing strategy does not always produce above normal returns. In fact, in the years 1986-1990 the category A portfolio actually has a lower return than the market average. This means that it would be more profitable for an investor to pick a random basket of stocks than to focus on value stocks alone.

Even though the mean return of the growth stocks is lower than the mean return of the value stocks for the period of time studied, several years have growth stocks performing superior to value stocks. During 1982, 1989, 1990, and 1993 the growth stock portfolio outperformed the value stock portfolio by a wide margin. Thus, the conclusion can be made that growth stocks are not always riskier investments than value stocks on a yearly basis. In fact, the period of the 1990's saw high returns for growth stocks and relatively low returns for value stocks. When several decades are taken into consideration the average returns of value and growth stocks should be almost the same.

Part IV: Company Analysis

As mentioned, Wal-Mart Stores, Inc. will be used in this section as the company an investor might analyze to determine if growth style investing for this company would be appropriate. Wal-Mart Stores, Inc. was chosen as the company to analyze because of its number one ranking on the *FORTUNE* 500 list of largest U.S. companies. First,

however, a brief profile of Wal-Mart Stores, Inc. is needed to understand its position in the market.

Profile

Wal-Mart Stores, Inc., whose headquarters is in Arkansas, is primarily in the market of operating discount stores, supercenters, warehouses, and membership clubs.³² The store's main product lines are categorized as: grocery, sporting goods, electronics, pharmaceuticals, and one-hour photo. Wal-Mart Stores, Inc. is an international company with subsidiaries in countries such as: United States, Argentina, Brazil, Canada, China, and the United Kingdom. Wal-Mart Stores, Inc. also ranks as number one on the *FORTUNE* 500 list with revenues (in millions) of \$246,525.

Growth Stock?

As stated, the astute investor must use all information possible to determine if a company is growth or not. The investor, however, must remember his/her opinion may be different about a particular company than another investor. Investing is not an exact science. There is no magical formula an investor can plug financial ratios and information into which will produce a buy or sell decision. Investing is organized and educated gambling. Thus, there is risk associated with decisions not only because the investor may make a decision base upon bad information, but also future economic events may change a company's position when the company did nothing itself to cause its downfall. Therefore, when determining a company to be growth or value, the investor should pull information about the company from multiple sources to help protect against bias opinions or bad information.

³² "Company Information." CBS Marketwatch Online.
<http://cbs.marketwatch.com/tools/quotes/profile.asp?sid=5318&symb=wmt&siteid=mktw> (15 April 2003).

Keeping all factors in mind, the following data was pulled from multiple sources and is current as of April 1, 2003³³:

Wal-Mart Stores Inc. Financial Information			
Stock Price (avg. 50-day) \$50.75			
EPS 1.81	EPS est. 2.04	PEG 1.68	P/E 30.13
ROA 9.63%	ROE 22.90%	P/B 5.66	

Table 4.1

Examining the financial data yields current EPS as \$1.81 and an estimate for the next quarter as \$2.04 for an EPS growth rate of 12.71%. Referencing this growth rate to other growth rates shown in other tables, this growth rate does not appear to be reflective of a typical growth company's rate. This EPS growth is good, however, is most likely a result of Wal-Mart's market domination and stabilization over the past few years.

The P/E ratio of 30.13 and PEG ratio of 1.68 also are not conducive numbers of growth-oriented companies. While the P/E ratio rule of thumb for normal priced stocks is 20 and Wal-Mart's is 30.13, Wal-Mart's P/E is not high enough to merit growth consideration. The PEG ratio is greater than one, thus automatically discredits its ability to be considered growth. While Wal-Mart is experiencing growth in its EPS and has decent numbers for their P/E and PEG ratios, a growth style investor would not be pleased with these numbers and would pass on Wal-Mart from these numbers alone.

The other two numbers, ROA of 9.63% and ROE of 22.9%, further the investor's sentiments about Wal-Mart not being a growth company. The returns are favorable and better than most investors could earn on their own, yet lack the size needed to be reflective of high-growth. The financials show Wal-Mart as a stable company earning

³³ Financial Information Sources: Yahoo! Finance Online, CBS Marketwatch Online, and Wall Street Journal Online.

good returns on their invested funds. The financials also show, however, that Wal-Mart has passed its high growth stage and is now maturing in its industry.

The following charts provide the industry financials for which an investor would compare Wal-Mart's to³⁴:

Aggregate Statistics for Retail Companies			
P/E	14.1	Revenue Growth	0.10%
PEG	0.8	ROE	9.70%

Table 4.2

Top 10 Retail Companies		
Rank	Company	P/E
1	Wal-Mart	30.1
2	The Home Depot	17.6
3	Lowe's Companies	30.6
4	Walgreen Co.	28.4
5	Target Corp.	17.9
6	Tesco PLC	15
7	Kohl's Corp.	31.6
8	USA Interactive	N/A
9	Costco Wholesale Corp.	22.8
10	The Gap, Inc.	30.6

Table 4.3

As the astute investor can see, Wal-Mart Stores, Inc. is outperforming its competitors in most of the financial ratio areas. The difference maker is, however, the P/E ratio. Where Wal-Mart is earning huge revenues, its P/E ratio is running with the pack. This indicator shows the dominance by Wal-Mart, but not high growth.

Wal-Mart's industry is a very old industry and has its share of regulations. These regulations have not prevented Wal-Mart from earning large revenue numbers. Therefore, the assessment of its exposure to regulation risk yields a decision of minimal risk exposure. Wal-Mart has also been very successful in keeping their prices low due to their inventory management system. Thus, customers continually shop at Wal-Mart for

³⁴ Information from: Yahoo! Finance Online. <http://biz.yahoo.com/ic/market/13.html> (15 April 2003).

low prices and availability of goods. The assessment of its exposure to customer loyalty risk also yields a decision of minimal risk exposure. The minimization of these two risk factors only leaves economic conditions as a factor for affecting growth. Due to Wal-Mart's diversification of its operations in several international markets, it is shielded from adverse conditions of a particular country. Thus, its exposure to economic conditions is minimized.

Upon examining Wal-Mart's financial ratios and exposure to risk and economic conditions, the astute investor would most likely determine Wal-Mart not a good buy under the growth style of investing. Wal-Mart is a market leader and very dominant in its industry, however, it is a maturing company and out of its high growth stage. Perhaps Wal-Mart would fit better under the value style of investing which the next section will cover.

Value Stock?

The financials for Wal-Mart are once again analyzed to determine if the company better fits into the value category than the growth category. Wal-Mart's P/E ratio of 30.13 is much higher than that of the normal value stock. Most stocks have an average P/E ratio of 10 to 30, and the value stocks usually have P/E ratios of less than 10. While the P/E ratio is not the only indicator of a value stock, it gives investors a good indication of stocks that are overvalued. In addition, Wal-Mart's P/B ratio is 5.66, which is much higher than the average ratio of 1.6. The implication is that the stock is valued much more highly than the historical accounting value of its assets. The ROA of 9.63% and the ROE of 22.90% are also much higher than the same ratios of the typical value stocks.

The reason that Wal-Mart does not qualify as a value stock is fairly obvious after one assesses the financial ratios and compares them with those of the typical value stocks. A more intuitive reason is that Wal-Mart is one of the leaders in its industry. It is a Fortune 500 company that is generating tremendous earnings year after year and is expanding its operations, with plans to continue rapid growth for at least the next five years.³⁵ Wal-Mart is overtaking many of the smaller retail and grocery chains in towns across the country, and according to the February 14 issue of Value Line the international growth prospects of Wal-Mart are very bright. The company does not have any cash flow problems at the current time and is able to use its earnings to meet working capital needs and to finance capital expenditures.

A value stock is most often a stock in some sort of distress. Value stocks have low prices for a reason, usually because of poor earnings forecasts or temporary problems that cause investors to be wary. Wal-Mart is not a firm that is currently in distress. It holds nearly 12% of the retail grocery market and is only looking to grow. While it is a firm in the mature stages of the business cycle and doesn't warrant the growth distinction, it is certainly not a value stock. Value stocks are usually not well known, highly established companies like Wal-Mart, although there may be exceptions to the rule.

A value stock is a risk because the investor does not know for sure the decrease in earnings or the management mistakes are temporary. The hope for the astute investor is that the market does not have all of the information and acts irrationally, so he or she can profit from the asymmetric information. The key is to put in the time and effort to research the stocks and study their financials to determine which stocks will be profitable and which ones should be avoided.

³⁵ Value Line Investment Surveys p.1692.

Part V: Conclusion

Investing in the stock market takes a lot of time and effort, not to mention money. One must have a complete picture of the market and be able to correctly use the investment tools and strategies needed to be a successful investor. A knowledgeable investor integrates company financials, market trends and forecasts, and strategy when choosing to invest. This paper has focused on the two most common strategies that investors use when selecting companies. The two strategies that were focused on were growth investing and value investing.

As mentioned before, growth investing seeks to invest in those companies with high earnings prospects. The old adage, “buy low and sell high,” does not apply to this style. Rather, growth investors buy high and sell even higher. In order to undertake this strategy, the astute investor must understand the financial variables involved with the growth style of investing. The growth investor must know growth stocks are typically characterized by high EPS growth, high P/E ratios, and are typically in industries which are slightly regulated by the government. High growth, however, is not a forever lasting condition, thus the growth investor must know when a company is on its way up and when the company is on its way down with respect to growth.

Growth investing can be highly rewarding. The key, however, is for the investor to not only be able to correctly assess a company to be growth, but also take a position in the company at the right time. While growth investing can be highly profitable, it can be highly dangerous as well. The dot-com boom is an excellent example. Several Internet companies sprang to life and experienced substantial growth in the 90's. Thus, investors poured huge amounts of money into their stocks hoping to ride the wave of their profits.

Once the boom was over, which they believed would never end, several investors lost the millions they had made off of these companies. As said before, growth style investing can be exciting, but the astute investor must understand all variables involved in order to be successful.

In direct contrast to growth investing, value investing is based on the idea of investing in the undervalued firms, or firms that do not seem to have large earnings prospects. The key indicators in finding value stocks are the price to earnings ratio, the price to book ratio, the dividend yield and the free cash flow. The risk in using the fundamental indicators to find value stocks is that sometimes the stocks that appear to be bargain stocks are actually stocks in distress. The value investor needs to be extremely careful not to select stocks that are considered “dogs.” The problem is that even an astute investor can make the wrong decision and select a stock that appears to be value, but is really a “dog.”

Historically, the average returns of value stocks are very similar to the average returns of growth stocks. However, the value strategy is much more of a long-term strategy, and is more compatible with the patient investor. Value investors have to realize that their returns will not come right away, and that they may not see substantial returns at all. Even though the value investing strategy is far from risk free, it is less risky than the growth strategy in general. During the 90's technology boom, the growth stocks outperformed the value stocks by a wide margin, but in other time periods the loss for growth stocks has been much higher than the loss for value stocks.

After thoroughly analyzing growth and value stocks, we feel that the decision ultimately comes down to each individual investor. Both strategies can yield positive

returns and accelerate one's wealth position, but both strategies can also decrease it as well. The astute investor must make a decision between risk and return, and determine the levels of both that he or she is willing to accept. Growth and value investing are both strategies that will continue to dominate the trading environment for years to come. The decision to invest using either the growth or value strategy should now be an informed decision after reading this paper. We the authors wish any investor the best of luck.

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